

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 100-114, and 120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleishman US 4202581 in view of Haataja WO 02/43950.

Re claims 100-105, Fleishman discloses a support comprising a support member (seat) 24 having a width and a plurality of integrally formed flexible springs 34 (see Fig. 2 for one defined by a U shaped channel integrally molded with the support member) including one with a free end and joined end (the smallest rib meets this limitation, see Fig. 2), wherein the flexible spring can flex independently from the support member (Col. 2, lines 40-54; describe the ribs deforming under an applied pressure). Fleishman discloses that the support could be made of wood (col 2, line 40-44) or another suitable material that would be obvious to one of ordinary skill in the art, but does not disclose that the spring or support member are fabricated substantially from wood flakes.

Haataja teaches a method of forming three dimensional objects with a wood flake (wood strand) molding process to improve the strength of the part (Col. 2, lines 28-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the support member disclosed by Fleishman by making the part out of wood processed with a wood flake molding process similar to the one taught by Haataja to improve the strength of the chair, thereby improving the weight load and margin of safety.

Re claims 106-114, see rejection of claims 100-105. Fleishman further discloses a base section 20 having a frame section 12 and main section 17, with a seating section 24 formed at an angle to said main portion.

Fleishman modified with Haataja discloses the claimed invention except for the seating section begin integral with the main section. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make these integral with each other, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893). Further, it has been held that the term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Further, Fleishman discloses a circular aperture through said frame section at the top of the curved frame section 12 (see Fig. 1), and a back 22 including a seat facing side with molded wood flake flexible springs extending outwardly from the seat

facing side (see Fig. 3, the springs in back section 22 extend behind the seat facing side of the seat).

Re claim 120, Fleishman modified with a teaching from Haataja discloses the invention as previously described in claim 107. Fleishman does not disclose a longitudinal indentation extending into said frame to stiffen said spring.

Haataja further teaches that it is known to use a longitudinal indentation 15 to further stiffen a molded wood flake article against a bending moment (Col 4, lines 24-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat disclosed by Fleishman by including a longitudinal channel similar to the one taught by Haataja to improve strength of the spring and improve resistance to bending, allowing for less resilient support.

Claim 115 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fleishman US 4202581 in view of Haataja WO 02/43950 as applied to claim 110, and further in view of Zeiler et al. US 2003/0011232.

Re claim 115, Fleishman modified with a teaching from Haataja disclose the invention as described in claim 110. Fleishman does not disclose an elastomeric mesh coupled to said springs.

Zeiler teaches that it is known in the art to include an elastomeric mesh cover to a seat to improve comfort by eliminating heat retention and increasing breathability (par [0022]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the seat disclosed by Fleishman by including an elastomeric mat similar to the one taught by Zeiler coupled to the springs to improve comfort by eliminating heat retention and increasing breathability.

Claims 116-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fleishman US 4202581 in view of Haataja WO 02/43950 and Hitt US 6485100.

Re claims 116-119 Fleishman discloses a support comprising a support member 46 having a frame section (not numbered, considered to include the section of 4 which has channels 54), a rigid panel 38, and a plurality of integrally formed flexible springs 56 defined by channels 54, and which include free ends and joined ends (see Fig. 5, the rounded arced tops of the springs 56 are considered to be free ends), wherein the flexible springs can flex independently from the support member (Col. 2, lines 40-54; describe the ribs deforming under an applied pressure); wherein at least one channel is molded into said support and terminates in said frame section with a circular aperture (see Fig. 5). Fleishman discloses that the support could be made of wood (col 2, line 40-44) or another suitable material that would be obvious to one of ordinary skill in the

art, but does not disclose that the spring or support member are fabricated substantially from wood flakes, or a foam pad.

Haataja teaches a method of forming three dimensional objects with a wood flake (wood strand) molding process to improve the strength of the part (Col. 2, lines 28-41).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the support member disclosed by Fleishman by making the part out of wood processed with a wood flake molding process similar to the one taught by Haataja to improve the strength of the chair, thereby improving the weight load and margin of safety.

Hitt teaches that it is known in the art to include a plurality of spaced foam pads 30, 20 between panels of a seat to provide comfort to a person using a chair (col. 1, lines 12-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the chair disclosed by Fleishman by including a plurality of foam pads as taught by Hitt to provide additional comfort to a user.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6824221, US 5976664, US 5577811, for seats with integrated springs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES ALEX whose telephone number is (571)270-

3740. The examiner can normally be reached on M-TH, 7:30 am to 5:00 pm; F, 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dunn David can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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